UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,282	12/15/2003	Hiroshi Nakahata	AA556C	4285

27752 7590 12/18/2008

THE PROCTER & GAMBLE COMPANY
Global Legal Department - IP
Sycamore Building - 4th Floor
299 East Sixth Street
CINCINNATI, OH 45202

EXAMINER	
HAND, MELANIE JO	

ART UNIT	PAPER NUMBER
3761	

MAIL DATE	DELIVERY MODE
12/18/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/736,282	NAKAHATA ET AL.	
	Examiner	Art Unit	
	MELANIE J. HAND	3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 September 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed September 17, 2008 have been fully considered but they are not persuasive. As to applicant's argument that Nakahata is not concerned with inhibiting extension of the chassis layer because the slits are only in the topsheet, the prior art of Malowaniec was introduced to remedy this deficiency of Nakahata, providing the extensibility control means as claimed. Therefore, the rejection is over the prior art of Nakahata in view of Malowaniec is appropriate. Applicant has only asserted that Malowaniec does not disclose an extensibility control means as currently claimed and not addressed the combination of Nakahata and Malowaniec. However, it is the article of Nakahata as modified by Malowaniec that contains an elastic waist feature (disclosed by Nakahata) serving as the extensibility control means of the chassis layer disclosed by Nakahata and modified by Malowaniec. Since, as stated before, Nakahata discloses a material for the elastic waist feature that is identical to a material disclosed by applicant for the claimed extensibility control means, Nakahata certainly fairly suggests an extensibility control means as recited in amended claim 1 exerting the recited tension force, as such a property is an inherent property of a material. Malowaniec does not need to meet the limitation of an extensibility control means because Nakahata already has met this limitation.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject

matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakahata (U.S. Patent No. 5,873,868) in view of Malowaniec (U.S. Patent No. 6,049,915).

With respect to **claim 1:** Nakahata discloses an absorbent article 200 having a pair of longitudinal side edges 50 and a first end edge 52, a second end edge 52, a first waist panel defining first waist region 46 adjacent to the first end edge 52, a second waist panel defining second waist region 44 adjacent to the second end edge 52, a crotch panel defining crotch region 48 positioned between the first and second waist panels, and a side panel 30 extending laterally outwardly from the first or second waist panel. (Figs. 1,2, Col. 3, lines 15-31, Col. 11, lines 1-5) The absorbent article 200 comprises a liquid pervious topsheet 202, an absorbent core 28 disposed underneath the topsheet 202, and a chassis layer in the form of backsheet 26, wherein the first or second waist panel comprises a portion of the chassis layer inasmuch as the first and second waist panels are part of the main structure of the diaper and the chassis layer comprises the main structure of the diaper. (Col. 3, lines 32-36, 45-47) The topsheet 202 includes a plurality of spaced discontinuities in the form of a pattern 204 of slits 206 regularly disposed in at least a portion of the first or second waist panel such that when the waist panel is subject to tension the discontinuities provide openings 212 that extend through the topsheet 202, thereby providing the topsheet, which is a chassis layer, with extensibility in the transverse direction. (Fig. 3, Col. 11, lines 5-8, 30-37). Nakahata discloses an extensibility controlling means in the form of elastic waist feature 34 to control the extensibility of the chassis layer inasmuch as elastic feature 34 is attached to the chassis layer (i.e. the elastic feature forms a portion of the end edge 52) and contracts to fit the user's waist, causing the chassis layer to

follow the motion of elastic feature when the elastic feature contracts. (Col. 7, lines 60-66, Col. 8, lines 2-5) The extensibility controlling means 34 of Nakahata is an elastic material wherein the extensibility controlling means inhibits the chassis layer from extending beyond extensibility causing breakage of the chassis layer via its ability to contract when an elongating force is removed, e.g. when the controlling means 34 contracts to fit the user's waist.

Nakahata teaches that the discontinuities 206 are present in topsheet 24, which is a chassis layer, but does not teach that the discontinuities are present in a separate chassis layer 22 from the topsheet as claimed. Malowaniec teaches an absorbent article having an absorbent core in the form of elastic layer 11 disposed between topsheet 13, and a chassis layer 12. Both chassis layer 12 and topsheet 13 include a plurality of spaced discontinuities 14 regularly disposed in at least a portion of the first or second waist panel (inasmuch as the incisions occur throughout the entire layer 12) such that when the waist panel is subject to tension the discontinuities 14 provide openings that extend through the chassis layer 12. Since Malowaniec teaches that both topsheet 13 and chassis layer 12 have discontinuities that lend extensibility to the otherwise inelastic material of topsheet 13 and chassis layer 12, and extensibility provides a more comfortable fit to the wearer during use, it would be obvious to one of ordinary skill in the art to modify the article of Nakahata so as to have discontinuities located in the chassis layer instead of or in addition to the topsheet as taught by Malowaniec to provide extensibility to the chassis layer to allow a more comfortable fit to the wearer. ('915, whole document)

With respect to **claim 2:** The extensibility causing breakage of the chassis layer 26 disclosed by Nakahata is between 10-500%, which overlaps the range of more than 20 %. (Col. 13, lines 10-12)

With respect to **claim 3:** Nakahata teaches the same materials for topsheet 24 as those set forth in the claimed disclosure for the claimed chassis layer. Thus, while Nakahata is silent regarding a percentage elongation of the topsheet associated with a tension force of 125 grams/25mm, it would be obvious to one of ordinary skill in the art to modify the article of Nakahata as modified by Malowaniec such that the extensibility controlling means 34 inhibits the chassis layer from extending beyond 20% at a tension force of 125 g/25 mm with a reasonable expectation of success to prevent breakage of the chassis layer that would impair or destroy the function of the diaper.

With respect to **claim 4:** The extensibility controlling means 34 disclosed by Nakahata is disposed in the first or second waist panel 46,44 in the transverse direction across at least the transverse width of the plurality of spaced discontinuities 206. (Fig. 2, Col. 7, line 65 – Col. 8, line 9, Col. 11, lines 1-8)

With respect to **claim 5:** The extensibility controlling means (waist feature 34) is present along, and thus disposed along, the end edge 52. (Col. 7, lines 59-66)

With respect to **claim 6:** The extensibility controlling means is a stretchable elastic material in the form of elastic waist feature 34. (Col. 7, lines 59-66)

With respect to **claim 7:** The chassis layer 22 disclosed by Nakahata comprises a liquid impervious material. (Col. 3, lines 32-35, Col. 4, lines 5-12)

With respect to **claim 8:** The absorbent article 20 disclosed by Nakahata comprises a liquid impervious sheet 26 disposed between the absorbent core and the chassis layer where the chassis layer is a holder and the diaper comprises a holder and liner wherein the liner contains the topsheet 24, backsheet 26 and core 28. (Col. 3, lines 39-43)

With respect to **claims 9,10:** Nakahata teaches that the core can be of various shapes and sizes. (Col. 7, lines 5-12) Thus while Nakahata does not explicitly teach that the absorbent core 28 does not extend into the first or second waist panel in which the discontinuities 206 are provided, it would be obvious to one of ordinary skill in the art to modify the article of Nakahata to meet this limitation, as the core is substantially inelastic and would inhibit the elasticity of the topsheet 24 and may interfere with the function of extensibility controlling means 26, which is contrary to one of the problems sought to be solved by Nakahata, i.e. to provide an elastically extensible topsheet 24.

With respect to **claim 11:** The discontinuities 206 disclosed by Nakahata are slits. (Col. 11, lines 5-9)

With respect to **claim 12:** The discontinuities 206 disclosed by Nakahata comprise a plurality of cuts wherein the cuts comprise rectilinear cuts. (Col. 11, lines 5-9)

With respect to **claim 13:** The discontinuities 206 disclosed by Nakahata are regularly disposed as a pattern 204 in the chassis layer 22. (Col. 11, lines 1-9)

With respect to **claim 14:** The discontinuities 206 disclosed by Nakahata are oriented such that the discontinuities extend in a longitudinal direction. (Fig. 2, Col. 11, lines 9-13)

With respect to **claim 15:** The discontinuities 206 disclosed by Nakahata are aligned in the longitudinal direction in an array of columns and rows seen in Fig. 2 such that the discontinuities form a plurality of laterally spaced columns 208 as seen in Fig. 4 which extend in the longitudinal direction. (Col. 11, lines 16-21)

With respect to **claim 16:** The discontinuities 206 disclosed by Nakahata are located in the topsheet 24 which is treated to be hydrophobic and thus the discontinuities 206 comprise a plurality of edges wherein the edges are treated. (Col. 6, lines 9-12) The limitation "to strengthen the edges" constitutes functional language that is given little patentable weight herein. The combined teaching of Nakahata and Malowaniec meets all of the structural limitations of claim 16 and claim 1 from which it depends regarding the material of the chassis layer and the discontinuities, and the manner of the claimed treatment, therefore the edges of the discontinuities of the combined teaching of Nakahata and Malowaniec are necessarily treated in such a manner as to strengthen the edges of the instant discontinuities.

With respect to **claims 17,18:** The discontinuities 206 disclosed by Nakahata are arranged such that the application of a tensile force to the chassis layer results in a plurality of equal area openings having an area from about 1 mm^2 to about 2500 mm^2. (Col. 12, lines 16-22)

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELANIE J. HAND whose telephone number is (571)272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melanie J Hand/
Examiner, Art Unit 3761

/Tatyana Zalukaeva/
Supervisory Patent Examiner, Art Unit 3761